

CLAIMS:

1. A key-changeable lock, comprising:

a lock housing (9); and

a lock cylinder (2) provided within the lock housing (9), the lock cylinder (2) including a shell (12) for the lock cylinder, a locking hole (11) provided on the shell (12) and into which a key (8) can be inserted, and a locking block (1) slidably mounted on the shell (12);

wherein a sliding block (6) is slidably provided in the shell (12), the locking block (1) is abutted against the sliding block (6), toothed slides (4) are slidably provided within the sliding block (6), and a toothed piece (3) provided with a block groove (15) is slidably disposed within the shell (12), and

wherein the locking block (1) can be located at two working positions, and at a first working position, the locking block (1) is not held in the block groove (15) and the teeth of the toothed piece (3) engage with the teeth of the toothed slide (4), and at a second working position, the locking block (1) is held in the block groove (15) and the teeth of the toothed piece (3) disengage from those of the toothed slide (4).

2. The key-changeable lock of claim 1, wherein springs (7) are provided between the sliding block (6) and the shell (12).

3. The key-changeable lock of claim 1, wherein a compression spring (5) is provided between the toothed slide (4) and the sliding block (6).

4. The key-changeable lock of claim 1, wherein the sliding direction of the sliding block (6) is perpendicular to that of the toothed piece (3).

5. The key-changeable lock of claim 1, wherein a contactor (16) is fixed on the toothed slide (4) and located within the locking hole (11).

6. The key-changeable lock of claim 1, wherein a locking groove (17) is provided on the lock housing (9); when the locking block (1) is located at the first working position, the locking block (1) is received in the locking groove; and each side face of the locking groove (17) is provided with a guiding slant (18).